

## MISCELLANEOUS.

*Description of the Larva of a Brachiopod.*

By F. MÜLLER.

DR. F. MÜLLER has sent from Brazil the description of a larva belonging undoubtedly to a Brachiopod, which is the more interesting as the Brachiopoda are the only Mollusca regarding the development of which we have no information.

The larva in question is a small, perfectly orbicular bivalve Mollusk. The two valves are similar, but unequal in size, the dorsal valve being the largest. At the place of the hinge a small oval plate is placed transversely between the two valves of the shell. The mantle is gaping all round. Five pairs of very stiff setæ, of which one is much stronger than the others and curved backwards, project at the periphery. They originate in the mantle of the ventral half; at least, this is the case with four of them. A series of finer setæ spring from the circumference of the mantle of the dorsal valve, and curve down upon the outside of the ventral valve. The animal, as well as the shell, would be divided into two perfectly symmetrical halves by a plane drawn vertically through the middle of the hinge. The body, which is furnished with an alimentary canal, two auditory capsules, and two eyes, fills the posterior half of the space between the valves. The anterior half is occupied by four pairs of cylindrical arms, between which a rounded knob is situated. Behind this knob the mouth is perceptible. These four pairs of arms are supported upon a common peduncle, at the extremity of which, therefore, the mouth is placed. The arms are covered with a very well developed ciliary coat, by the agency of which the little animal swims. The reproductive and circulatory organs are wanting.

During natation, the mouth is always directed forwards, which is in favour of the generally received opinion as to the anterior and posterior regions in the Brachiopoda. It is, in fact, now evident that the Brachiopods are *depressed* animals, have an anterior or ventral and a posterior or dorsal valve. MM. Agassiz and Vogt are therefore wrong in regarding them as *compressed* animals, like the Lamelibranchiate Mollusks—that is to say, as animals having a right and a left valve.

The larva, moreover, can not only swim, but also creep. This latter mode of progression is effected by a sort of rotation of the ventral valve alternately to the right and left. In this movement the animal pushes by supporting itself principally upon the strongest of the bristles above mentioned. — *Reichert und Du Bois' Archiv*, 1860, p. 72.